

**Notice of Allowability**

Application No.

10/724,543

Examiner

CUONG H. NGUYEN

Applicant(s)

KANE, RICHARD L.

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received on 2/15/07.
2. ☒ The allowed claim(s) is/are 1-15, 17-31, they are renumbered as claims 1-30; 3 sheets of formal drawings (2/15/07) are accepted.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

CUONG H. NGUYEN  
Primary Examiner  
Art Unit: 3661

1. This Office Action is the answer to the amendment filed on ~~2/15~~2/15/2007, which paper has been placed of record in the file.
2. Claims 1-15, and 17-31 are pending in this application; claims 16, and 32 were canceled by the amendment filed 2/15/2007.
3. 3 replacement sheets of drawings (FIGS. 1-3) received 2/15/2007 are acceptable.

***Allowable Subject Matter & Reasons for Allowance***

4. Independent claims 1 and 17 are patentable over references of Ratkovic et al. (US Pat. 6,573,486), Katz et al. (US Pat. 6,473,676), and Shiller et al. (US Pub. 2003/0137433) because these documents do not disclose a system or a method for assisting a pilot flying an aircraft having solid state gyros and a turn coordinator gyro on-board, in addition to other limitations, comprises a means on-board the aircraft for determining the roll rate of the aircraft from satellite-based radio navigation signals and from said solid state gyros and said turn coordinator gyro on-board the aircraft.

- Ratkovit et al.'s reference is directed about a projectile.
- Katz et al. teach about using four sensors to sense the linear acceleration in vertical direction, airspeed, roll rate/yaw rate, and magnetic heading of the aircraft, respectively. A signal processor coupled to the sensors, has pitch angle, roll angle, and heading angle estimators and an output. A display displays the angle estimation output from the signal processor to the pilot; however, these information are not satellite-based radio navigation signals.
- Peter J. Schiller et al. teach a system has two sensors including rotational rate sensors and compensation sensors providing rotational rate signals and compensation signals respectively. The rotational rate sensor has a gyro with a single sheet of

piezoelectric material. A microcontroller processes the signals and a display displaying attitude, directional, and turn coordinate information simultaneously; however, these information are not provided from a GPS.

5. Dependent claims 2-15, and 18-31 are patentable because they are dependent on above independent claims.

***Conclusion***


6. Claims 1-15, and 17-31 are patentable.

Claims 17, 30-31 are renumbered as claims 16, 17, and 30.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose telephone number is 571-272-6759 (email address: cuong.nguyen@uspto.gov). The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax number for the organization where this application is assigned is 571-273-6759.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
CUONG NGUYEN  
PRIMARY EXAMINER